UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,416	11/16/2001	Martin Thomas Miller	455610-2420	8540

20999 7590 10/04/2005

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER	
WEST, JEFFREY R	
ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/988,416	MILLER ET AL.	
	Examiner	Art Unit	
	Jeffrey R. West	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07/18/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 14, 22, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,301,336 to Kodosky

As per claims 1, 14, 22, and 35, Kodosky discloses a method of configuring and performing processing in a system including a function generator, digital multimeter, and unit under test (column 17, lines 36-42) comprising the steps of receiving one or more input parameters (column 32, lines 47-50), defining a set of operating instructions input/generated by a user to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 9, lines 58-64 and column 32, line 50 to column 33, line 16), assigning a graphical representation for each of the plurality of defined processing elements (column 33, lines 19-25), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web, wherein the plurality of processing elements

are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 34, lines 1-16 and Figure 74).

Although the invention of Kodosky does not explicitly state that the processing be performed in a digital oscilloscope, rather than a function generator, such a limitation is considered to be an intended use. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, since the structure of Kodosky is capable of performing the processing in any of a wide variety of devices, such as a digital oscilloscope, it meets the claim.

Further, the recitation for processing in a digital oscilloscope occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Further still, it would have been obvious to one having ordinary skill in the art to explicitly state that the processing is carried out in a digital oscilloscope because the invention of Kodosky does consider implementation in a plurality of devices including a function generator and/or oscillation measuring device (column 2, lines 22-34), and

the modification would have improved the state of the art by providing increased utility of the device of Kodosky in a wider variety of environments.

3. Claims 1, 14, 22, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,479 to Sojoodi et al. in view of U.S. Patent No. 5,301,336 to Kodosky

Sojoodi discloses a method of configuring and performing processing a digital oscilloscope (column 1, lines 50-67) comprising the steps of receiving one or more input parameters (column 19, lines 48-59), defining a set of operating instructions (column 15, lines 11-15, column 17, lines 30-54, and column 25, lines 46-56) to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 10, lines 59-64), assigning a graphical representation for each of the plurality of defined processing elements (column 13, lines 51-67), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web (column 17, line 55 to column 18, line 2), wherein the plurality of processing elements are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 18, lines 3-32).

As noted above, the invention of Sojoodi teaches many of the features of the claimed invention, and while the invention of Sojoodi does teach a plurality of

processing devices each with specifically instructions to be carried out, wherein the user selects the processing devices as desired as well as applies desired attributes, Sojoodi provides a list of instructions that can be applied to the respective processing devices rather than allowing the user to input the instructions that each processing device carries out.

Kodosky discloses a method of configuring and performing processing in a system including a function generator, digital multimeter, and unit under test (column 17, lines 36-42) comprising the steps of receiving one or more input parameters (column 32, lines 47-50), defining a set of operating instructions input/generated by a user to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 9, lines 58-64 and column 32, line 50 to column 33, line 16), assigning a graphical representation for each of the plurality of defined processing elements (column 33, lines 19-25), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web, wherein the plurality of processing elements are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 34, lines 1-16 and Figure 74).

It would have been obvious to one having ordinary skill in the art to modify the invention of Sojoodi explicitly allow the user to input the instructions that each

processing device carries out, as taught by Kodosky, because, as suggested by Kodosky, the combination would have allowed the user to create his own processing devices, rather than only select what has been provided by the system (column 9, lines 52-64) thereby providing more use to the user through system customization allowing the user to create processing elements with the ability to execute instructions desired by the user (column 34, lines 14-22).

4. Claims 1-6, 14-16, 18-27, 35-37, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,809,189 to Batson in view of U.S. Patent No. 5,301,336 to Kodosky.

As per claims 1, 14, 22, and 35, Batson discloses a method for configuring and performing processing in a digital oscilloscope (abstract) comprising the steps of receiving one or more input parameters/instructions (column 4, lines 14-18 and column 18, lines 53-58), defining a plurality of connected discrete processing elements based upon the received input parameters/instructions, and connecting the plurality of processing elements to define a processing web controlling the flow of information (column 5, lines 40-45 and column 18, line 61 to column 19, line 20).

As per claims 2-5, 15, 16, 23-26, 36, and 37, Batson also discloses updating at least two of the processing elements from an idle state using a processing control object (column 19, lines 53-54), wherein the updating of the processing elements are at different speeds with one of the processing elements operating a higher

acquisition speed and another operating at a lower display speed (column 20, lines 13-30).

As per claims 6 and 27, Batson also discloses that the element operating at a higher acquisition/processing operation speed is cumulative (analyzes a cumulative collection of data) (column 22, lines 57-68), while the element operating at a lower display speed is not cumulative (i.e. receives the data in sequence) (column 26, lines 11-15).

As per claims 19, 20, 40 and 41, Batson discloses that when updating the processing elements, one of the processing elements requests desired data from an upstream source when data is requested from it by a downstream processing element (i.e. the display controller requests data from waveform memory "16" through memory management unit "14") (column 5, lines 9-29 and Figure 1), wherein the processing element is a rendering processing object (i.e. display controller), and there are no buffers present between the plurality of processing elements (Figure 1).

As per claims 18, 21, 39, and 42, Batson also discloses updating one or more of the processing elements when one of the processing elements is redefined (column 19, lines 16-60) and when new data is available (column 19, lines 10-12).

As noted above, the invention of Batson teaches many of the features of the claimed invention and while the invention of Batson does teach defining a processing web in an oscilloscope, Batson does not provide a corresponding means for defining the processing web graphically.

Kodosky discloses a method of configuring and performing processing in a system including a function generator, digital multimeter, and unit under test (column 17, lines 36-42) comprising the steps of receiving one or more input parameters (column 32, lines 47-50), defining a set of operating instructions input/generated by a user to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 9, lines 58-64 and column 32, line 50 to column 33, line 16), assigning a graphical representation for each of the plurality of defined processing elements (column 33, lines 19-25), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web, wherein the plurality of processing elements are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 34, lines 1-16 and Figure 74).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson to include a corresponding means for defining the processing web graphically, as taught by Kodosky, because, as suggested by Kodosky, the combination would have simplified the use of a device, such as the oscilloscope of Batson, while allowing a user with limited programming skills to efficiently use the device (column 1, lines 35-64).

5. Claims 1-6, 14-16, 18-27, 35-37, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,809,189 to Batson in view of U.S. Patent No. 5,920,479 to Sojoodi et al. and further in view of U.S. Patent No. 5,301,336 to Kodosky.

As per claims 1, 14, 22, and 35, Batson discloses a method for configuring and performing processing in a digital oscilloscope (abstract) comprising the steps of receiving one or more input parameters/instructions (column 4, lines 14-18 and column 18, lines 53-58), defining a plurality of connected discrete processing elements based upon the received input parameters/instructions, and connecting the plurality of processing elements to define a processing web controlling the flow of information (column 5, lines 40-45 and column 18, line 61 to column 19, line 20).

As per claims 2-5, 15, 16, 23-26, 36, and 37, Batson also discloses updating at least two of the processing elements from an idle state using a processing control object (column 19, lines 53-54), wherein the updating of the processing elements are at different speeds with one of the processing elements operating a higher acquisition speed and another operating at a lower display speed (column 20, lines 13-30)

As per claims 6 and 27, Batson also discloses that the element operating at a higher acquisition/processing operation speed is cumulative (analyzes a cumulative collection of data) (column 22, lines 57-68), while the element operating at a lower display speed is not cumulative (i.e. receives the data in sequence) (column 26, lines 11-15).

As per claims 19, 20, 40 and 41, Batson discloses that when updating the processing elements, one of the processing elements requests desired data from an upstream source when data is requested from it by a downstream processing element (i.e. the display controller requests data from waveform memory "16" through memory management unit "14") (column 5, lines 9-29 and Figure 1), wherein the processing element is a rendering processing object (i.e. display controller), and there are no buffers present between the plurality of processing elements (Figure 1).

As per claims 18, 21, 39, and 42, Batson also discloses updating one or more of the processing elements when one of the processing elements is redefined (column 19, lines 16-60) and when new data is available (column 19, lines 10-12).

As noted above, the invention of Batson teaches many of the features of the claimed invention and while the invention of Batson does teach defining a processing web in an oscilloscope, Batson does not provide a corresponding means for defining the processing web graphically.

Sojoodi discloses a method of configuring and performing processing a digital oscilloscope (column 1, lines 50-67) comprising the steps of receiving one or more input parameters (column 19, lines 48-59), defining a set of operating instructions (column 15, lines 11-15, column 17, lines 30-54, and column 25, lines 46-56) to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 10, lines 59-64), assigning a graphical

representation for each of the plurality of defined processing elements (column 13, lines 51-67), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web (column 17, line 55 to column 18, line 2), wherein the plurality of processing elements are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 18, lines 3-32).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson to include a corresponding means for defining the processing web graphically, as taught by Sojoodi, because, as suggested by Sojoodi, the combination would have simplified the use of an oscilloscope, such as the oscilloscope of Batson, by presenting control of the instrumentation to the user in an organized and simplified graphical user interface (column 2, lines 4-20).

As noted above, the invention of Batson and Sojoodi teaches many of the features of the claimed invention, and while the invention of Batson and Sojoodi does teach a plurality of processing devices each with specifically instructions to be carried out, wherein the user selects the processing devices as desired as well as applies desired attributes, the combination provides a list of instruction that can be applied to the respective processing devices rather than allowing the user to input the instructions that each processing device carries out.

Kodosky discloses a method of configuring and performing processing in a system including a function generator, digital multimeter, and unit under test (column

17, lines 36-42) comprising the steps of receiving one or more input parameters (column 32, lines 47-50), defining a set of operating instructions input/generated by a user to be associated with a plurality of processing elements for performing a discrete function based upon said one or more input parameters, to enable said processing elements to carry out said instructions (column 9, lines 58-64 and column 32, line 50 to column 33, line 16), assigning a graphical representation for each of the plurality of defined processing elements (column 33, lines 19-25), and connecting a plurality of said graphical representatives, in accordance with manipulation of the graphical representatives, corresponding to a plurality of the defined processing elements to define and graphically depict a processing web, wherein the plurality of processing elements are controlled to manage and allow the proper flow of data through the plurality of processing elements (column 34, lines 1-16 and Figure 74).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson and Sojoodi explicitly allow the user to input the instructions that each processing device carries out, as taught by Kodosky, because, as suggested by Kodosky, the combination would have allowed the user to create his own processing devices, rather than only select what has been provided by the system (column 9, lines 52-64) thereby providing more use to the user through system customization allowing the user to create processing elements with the ability to execute instructions desired by the user (column 34, lines 14-22).

6. Claims 7-9, 11, 12, 17, 28-30, 32, 33, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batson in view of Kodosky and further in view of U.S. Patent No. 5,668,469 to Natori et al.

As noted above, the invention of Batson and Kodosky teaches many of the features of the claimed invention, and while the invention of Batson and Kodosky does disclose synchronizing communication between the microprocessor and the memory control unit (Batson, column 7, lines 63-68), the combination does not specifically disclose synchronizing the display controlling processor devices.

Natori teaches a digital oscilloscope using a color plane display device and data display method comprising a plurality of processing elements, including acquisition devices and display devices, (Figure 1), wherein the data read out of a display memory using a display controller is in synchronization with the other processing elements (abstract and column 4, line 42 to column 5, line 14).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson and Kodosky to include synchronizing the display controlling processor devices, as taught by Natori, because it is common in the art to synchronize components to insure that data output by a first device is received by a second downstream device at the same rate to insure accurate operation and Natori suggests that the combination would have provided correct timing for desired processing and increased resolution (column 4, lines 42-58).

7. Claims 7-9, 11, 12, 17, 28-30, 32, 33, and 38 are rejected under 35 U.S.C.

103(a) as being unpatentable over Batson in view of Sojoodi and Kodosky and further in view of U.S. Patent No. 5,668,469 to Natori et al.

As noted above, Batson in combination with Sojoodi and Kodosky teaches many of the features of the claimed invention, and while the invention of Batson, Sojoodi, and Kodosky does disclose synchronizing communication between the microprocessor and the memory control unit (Batson, column 7, lines 63-68), the combination does not specifically disclose synchronizing the display controlling processor devices.

Natori teaches a digital oscilloscope using a color plane display device and data display method comprising a plurality of processing elements, including acquisition devices and display devices, (Figure 1), wherein the data read out of a display memory using a display controller is in synchronization with the other processing elements (abstract and column 4, line 42 to column 5, line 14).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson, Sojoodi, and Kodosky to include synchronizing the display controlling processor devices, as taught by Natori, because it is common in the art to synchronize components to insure that data output by a first device is received by a second downstream device at the same rate to insure accurate operation and Natori suggests that the combination would have provided correct timing for desired processing and increased resolution (column 4, lines 42-58).

8. Claims 10, 13, 31, and 34, as may best be understood, are rejected under 35

U.S.C. 103(a) as being unpatentable over Batson in view of Kodosky and Natori and further in view of U.S. Patent No. 5,736,971 to Shirai.

As noted above, Batson in combination with Kodosky and Natori teaches many of the features of the claimed invention, and while the invention of Batson, Kodosky, and Natori does disclose updating processing elements based upon a request, the combination does not specify that the processing element requests the update upon activation of an update pin, wherein the processing element receives at least one input on an input pin and produces at least zero outputs on an output pin.

Shirai teaches a method and apparatus for increasing resolution of a computer graphics display including a display controller for connection to a CRT (column 5, lines 12-15) that receives data inputs through at least one input pin (i.e. pin connector CN1) (column 5, lines 34-45), produces outputs through at least one output pin (i.e. pin connectors CN2-CN4) (column 5, lines 4-6), and receives controlling instructions through a processor at a pin (i.e. pin connector CN1) (column 4, lines 43-49).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson, Kodosky, and Natori to include specifying that the processing element requests the update upon activation of an update pin, wherein the processing element receives at least one input on an input pin and produces at least zero outputs on an output pin, as taught by Shirai, because the invention of Batson, Kodosky, and Natori does teaches the application of the processing device that receives data, outputs data, and receives controller signals from a processor for

update indications, but does not give the specifics as to how the data is received (i.e. through pins), and Shirai suggests a corresponding structure applicable to carry out the invention of Batson, Kodosky, and Natori that further allows synchronizing adjustments to improve processing (column 2, lines 45-50).

9. Claims 10, 13, 31, and 34, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Batson in view of Sojoodi, Kodosky, and Natori and further in view of U.S. Patent No. 5,736,971 to Shirai.

As noted above, Batson in combination with Sojoodi, Kodosky, and Natori teaches many of the features of the claimed invention, and while the invention of Batson, Sojoodi, Kodosky, and Natori does disclose updating processing elements based upon a request, the combination does not specify that the processing element requests the update upon activation of an update pin, wherein the processing element receives at least one input on an input pin and produces at least zero outputs on an output pin.

Shirai teaches a method and apparatus for increasing resolution of a computer graphics display including a display controller for connection to a CRT (column 5, lines 12-15) that receives data inputs through at least one input pin (i.e. pin connector CN1) (column 5, lines 34-45), produces outputs through at least one output pin (i.e. pin connectors CN2-CN4) (column 5, lines 4-6), and receives controlling instructions through a processor at a pin (i.e. pin connector CN1) (column 4, lines 43-49).

It would have been obvious to one having ordinary skill in the art to modify the invention of Batson, Sojoodi, Kodosky, and Natori to include specifying that the processing element requests the update upon activation of an update pin, wherein the processing element receives at least one input on an input pin and produces at least zero outputs on an output pin, as taught by Shirai, because the invention of Batson, Sojoodi, Kodosky, and Natori does teaches the application of the processing device that receives data, outputs data, and receives controller signals from a processor for update indications, but does not give the specifics as to how the data is received (i.e. through pins), and Shirai suggests a corresponding structure applicable to carry out the invention of Batson, Sojoodi, Kodosky, and Natori that further allows synchronizing adjustments to improve processing (column 2, lines 45-50).

Response to Arguments

10. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. 6,570, 592 to Sajdak et al. teaches a system and method for specifying trigger condition of a signal measurement system using graphical elements on a graphical user interface.

U.S. Patent No. 5,953,009 to Alexander teaches a graphical system and method for invoking measurements in a signal measurement system.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrw
September 28, 2005

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800